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### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re the Application of: Michael Lee Application No.: 10/619,295 Examiner: Stephen Luther Blau Filed: July 14, 2003 Docket No.: NKTZ 00061 For: **GOLF IRON** RECEIVED Board of Patent Appeals and Interferences U.S. Patent and Trademark Office AUG 2 8 2007 P.O. Box 1450 Alexandria, VA 22313-1450 **TECHNOLOGY CENTER R3700** TRANSMITTAL OF REPLY BRIEF Dear Sir: Applicants transmit REPLY BRIEF responsive to the Examiner's Answer mailed June 20, 2007 for the above-referenced patent application. No fee is believed to be due. The Commissioner is authorized to charge any fees which may be required or credit any overpayment to Deposit Account No. 06-0308 Respectfully submitted, **FAY SHARPE LLP** August 20, 2007 Date 1100 Superior Avenue, Seventh Floor Cleveland, Ohio 44114-2579 (216) 861-5582 Certificate of Mailing or Transmission I hereby certify that this Reply Brief (and any item referred to herein as being attached or enclosed) is (are) being deposited with the United States Postal Service as First Class Mail, addressed to: Board of Patent Appeals and Interferences, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450 on the date indicated below. transmitted to the USPTO by electronic transmission via EFS-Web on the date indicated below. Express Mail Label No.: Signature

Name: Audrey M. Dragen

Date: August 20, 2007

## THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE HONORABLE BOARD OF PATENT APPEALS AND INTERFERENCES

In re the Application of: Michael Lee

Application No.: 10/619,295 Examiner: Stephen Luther Blau

Filed: July 14, 2003 Docket No.: NKTZ 2 00061

For: GOLF IRON

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<u>REPLY BRIEF</u> (37 C.F.R. § 41.41)

**TECHNOLOGY CENTER P3709** 

Appeal from Nickent Golf Equipment Co.

Jonathan A. Withrow, Reg. No. 54,548 FAY SHARPE LLP 1100 Superior Avenue – Seventh Floor Cleveland, Ohio 44114-2579 Telephone: (216) 861-5582 Attorneys for Appellants

CERTIFICATE OF MAILING OR TRANSMISSION			
I hereby certify that this correspondence (and any item referred to herein as being attached or enclosed) is (are) being deposited with the United States Postal Service as First Class Mail, addressed to: Board of Patent Appeals and Interferences, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450 on the date indicated below.			
transmitted to the USPTO by electronic transmission via EFS-Web on the date indicated below.			
Express Mail Label No.:	Signature: Ludan M Deagne		
Date: August 20, 2007	Name: Audrey M. Dragdny		

This is in reply to the Examiner's Answer in the above-captioned application, mailed on June 20, 2007.

#### (1) Real Party in Interest

A statement identifying by name the real party in interest is contained in Appellant's Appeal Brief.

#### (2) Related Appeals and Interferences

Appellant is not aware of any related appeals, interferences, or judicial proceedings which would directly affect or be directly affected by or have a bearing on the Board's decision in this pending Appeal.

#### (3) Status of Claims

Appellant thanks the Examiner for an indication that the status of the claims contained in the Appeal Brief is correct.

#### (4) Status of Amendments After Final

Appellant thanks the Examiner for the confirmation that the Appellant's Statement of the Status of Amendments After Final Rejection contained in the Appeal Brief is correct.

#### (5) Summary of Claimed Subject Matter

Appellant thanks the Examiner for the confirmation that the Summary of the Claimed Subject Matter contained in Appellant's Brief is correct.

#### (6) Grounds of Rejection to be Reviewed on Appeal

Appellant thanks the Examiner for the confirmation that Appellant's Statement of the Grounds of Rejection to be Reviewed on Appeal is correct.

#### (7) Claims Appendix

Appellant thanks the Examiner for the confirmation that the copy of the appealed claims contained in the Appendix filed together with the Appeal Brief is correct.

#### (8) Evidence Relied Upon

D244,558	Elkins	5-1977
4,128,242	Elkins	12-1978
5,447,311	Viollaz	9-1995
4,438,931	Motomiya	3-1984
6,551,200	Golden et al.	4-2003
2003/0139225	Rife	2-2005
5,328,175	Yamada	7-1994

<sup>4-332573, (</sup>Japanese) Head of a golf club, Sogaishi et al., 19 November 1992.

#### (9) Grounds of Rejection

The grounds of rejection are found in the Examiner's Answer, mailed June 20, 2007.

#### (10) Response to Argument

Muscle back irons concentrate mass towards the bottom half of the head to help the golf ball get airborne. Page 1, line 13 – 14, Applicant's specification. For those who do not strike the ball consistently, muscle back irons, however, are difficult to hit accurately. The inventor has developed a golf club that has the look of a muscle back iron as well as some of the characteristics of a muscle back iron while providing the forgiveness of a cavity back iron. This is the reason for the recitation in claim 20 which recites a golf club head comprising a muscle back portion that includes "a cavity disposed vertically towards an upper portion of the extra mass portion... and a substantial portion of the extra mass portion being positioned below the cavity." This is also the reason for claim 22, which is directed to a golf club head comprising a muscle back portion "defining a cavity disposed toward an upper portion of the muscle back

portion, such that a large portion of the muscle back portion is positioned under the cavity so that mass is still concentrated towards the bottom of the club head."

The primary reference, Elkins '558 and the first secondary reference Elkins '242 may, in combination, disclose what appears from the outside to be a muscle back iron and the iron includes a cavity not visible from the outside. Nevertheless, Viollaz, nor any of the other references cited by the Examiner (Golden, 4-332573, and Yamada), fails to provide an adequate reason that would lead one skilled in the art to modify the club head of the Elkins combination so that the cavity would be disposed vertically towards an upper portion of the extra mass portion of the muscle back portion.

The reasons provided by the Examiner to modify the club head of the Elkins combination to dispose the cavity vertically towards an upper portion of the extra mass portion are (1) to modify the center of gravity to help different golfers who have swings which are different and (2) to minimize drag on the sole of the head when impacting a ground and rounded leading edges and trailing edges help minimize this drag.

As for modification of the center of gravity, Viollaz provides no teaching of modification of the center of gravity other than "preserving a conventional weight distribution." Col. 1, line 52. Yamada and the English description of 4-332573 do not provide a discussion of modifying the center of gravity.

Modification of the center of gravity is taught in Elkins '242 as introducing a mixture of metal shot and adhesive into the hollow portion. After having read Elkins '242 one of ordinary skill in the art would have been inclined to introduce the mixture of metal shot and adhesive into the hollow portion, as opposed to positioning a large portion or a substantial portion of the muscle back portion below the cavity.

The remaining prior art references discuss modification of the center of gravity by positioning a lower peripheral weight on a lower portion of a rear surface of a cavity back iron in Rife or a lower rear mass in Golden. Modification of the center of gravity can be achieved in a number of different manners. The invention, however, is not simply the modification of the center of gravity. Rather, the invention is the modification of a muscle back club head so that it has the characteristics of a cavity back iron while maintaining the look of and some of the features of a muscle back iron.

None of the prior art references recognize the desirability of providing the look of a muscle back iron while delivering some of the features of a cavity back design. Applicant's invention provides these benefits by requiring the cavity to be "not visible from an exterior of the golf club" and by providing "a substantial portion of the extra mass portion being positioned below the cavity." Accordingly, Applicant has not merely replaced one method of modifying the weight distribution in a club head for another method. Applicant has taken the extra step of providing a club head that has the look of one club, i.e. a muscle back iron, while providing the performance of another club, i.e. a cavity back iron.

As for the minimization of drag on the sole of the head, this rounding of the leading edge and the trailing edge of a golf club head will not necessarily result in the a substantial portion of the extra mass portion being positioned below the cavity. The trailing and leading edges of the club in Elkins '242 could very well be rounded without a substantial portion of the extra mass portion being positioned below the hollow portion of the Elkins '242 club head.

The invention resides in a golf club head that has the look of a muscle back iron while providing some of the benefits of a cavity back iron. The inventor cleverly realized that it would be desirable to design such a club because a golfer who can hit a muscle back iron well is thought of as a consistent ball striker, which is quite a goal in the realm of golf. The benefit of providing a gold club head that from the outside looked as if should only be used by a consistent ball striker but could be used by golfers having an inconsistent swing had not been contemplated by those of ordinary skill in the art of designing golf clubs.

Application No. 10/619,295

#### **CONCLUSION**

In view of the above amendments, comments, and arguments presented, applicants respectfully submit that all pending claims are patentably distinct and unobvious over the art of record.

Allowance of all pending claims and early notice to that effect is respectfully requested.

Respectfully submitted,

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